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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/742,654	12/21/2000	Michael Hannington	AVERP2850US	7505

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EXAMINER

CHANG, VICTOR S

ART UNIT PAPER NUMBER

1771

DATE MAILED: 01/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/742,654

Applicant(s)

HANNINGTON, MICHAEL

Examiner

Victor S Chang

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 and 32-95 is/are pending in the application.
- 4a) Of the above claim(s) 53-95 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 and 32-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

1. The Examiner has carefully considered Applicant's remarks and an Information Disclosure Statement (IDS) filed on 11/24/2003.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Rejections not maintained are withdrawn. In particular, Applicant's arguments with respect to the rejection of claims 27-29 and 32-52 under 35 U.S.C. 103(a) over Rusincovitch et al. (US 5676787) in view of GB 1511060 have been fully considered and are persuasive. However, Applicants' arguments are moot in view of the new grounds of rejection made over Calhoun et al. (US 5273805).

Response to Amendment

4. Claims 1-26 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling, substantially for the reasons set forth in sections 3 and 5 of Paper No. 20, together with the following additional observations.

It is noted that on page 264 of Applicant resubmitted copy of the excerpt from Adhesion and Adhesives Technology by Alphonsus B. Pocius shows that the necessary application conditions of pressure sensitive adhesive as being "none, just finger pressure". However, the Examiner repeats (see Paper No. 20, page 2) that while the reference by Pocius teaches in generally how pressure sensitive adhesive works, it makes no remarks indicating that pressure sensitive adhesive is typically fully cured.

Further, the Declaration appears to have confused "polymerization" as "curing" (or crosslinking) of polymer (see section 5 of Declaration), since while it is known that pressure sensitive adhesive are fully polymerized polymer, it cannot be fully cured (or crosslinked) polymer, as the curing would inherently restrict the mobility of polymer chain and render the adhesive non-tacky or non-adhesive.

Additionally, Applicant's response arguing that "the Examiner has failed to support the rejection with evidence and/or technical reasoning explaining any failure to comply with §112, and further, has failed to consider the rebuttal explanation provided by Applicant" (Remarks, pages 2-3, bridging paragraph) has been carefully considered, but is not persuasive. The Examiner believes that Applicant's Declaration has been fully considered, and the technical reasoning has been clearly provided in the prior Office action (Paper No. 20). Nevertheless the Examiner repeats (see Paper No. 20, pages 3-4) that Mr. Hannington's Declaration fails to provide evidentiary support regarding the feasibility of how the adhesive can be pulled away from the substrate to form air egress routes as shown in Fig. 3c by a pressure, which also causes the non-adhesive material forms to collapse to the facestock permanently. In particular, while section 8 of the Declaration describes a conventional air egress process, section 9 still fails to provide sufficient reasoning regarding the enablement for claims 1-26. It appears that Mr. Hannington's Declaration argues that any "standard adhesive tape" can be pushed by finger pressure against entrapped air bubble, so as to provide the claimed air egress property. But this description appears to be unrelated to the specific embodiment as shown in Figs. 3b and 3c of the instant invention. More specifically, the

Declaration fails to provide specific evidentiary support regarding how air egress channels of Fig. 3c can be formed by "finger pressure". Additionally, the Examiner notes that since the facestock is flexible (so as to be able to respond to finger pressure), it appears to be inherent for the air egress channel to collapse under pressure, and as such the argument that "to remove an air bubble trapped between the adhesive and the substrate ... light finger pressure is applied to the air bubble ... causes the adhesive to "dome up" into the channels created by the embedded non-adhesive material forms" (Declaration, section 9) appears unlikely, because the channel would have collapsed under pressure, and resulted in a process which is no more different than pushing an air bubble around under a "standard adhesive tape"; in other words, the non-adhesive material forms appear to be irrelevant to the "pushing" process.

5. Claims 27 and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Calhoun et al. (US 5273805).

Calhoun's invention is directed to a flexible carrier web has a planar surface bearing thereon a predetermined pattern consisting of at least one flat land area and at least one recess having a base and walls, and a layer of silicone on the land and/or the base of the recess while the walls of the recess are substantially free from the silicone. When that flexible carrier web is used as the backing of a pressure-sensitive adhesive layer, release values can be controlled simply by selecting the size and/or number of recesses (Abstract).

For claims 27 and 36, Calhoun's a layer of silicone on the base of the recess reads on the recitation "a pattern of non-adhesive material forms embedded into the lower surface of the adhesive layer". Claims lack novelty.

6. Claims 28, 29, 32- are rejected under 35 U.S.C. 103(a) as being unpatentable over Calhoun et al. (US 5273805).

The teachings of Calhoun are again relied upon as set forth above.

For claim 28, Calhoun teaches that the silicone layer preferably is no more than 2 μm in thickness (column 4, line 61).

For claim 29, Calhoun teaches that the silicone is typically crosslinked by exposure to heat, UV or electron beams (column 4, lines 1-2).

For claim 32, Calhoun teaches that the recess(es) can form a continuous grid or disconnected recesses of individual dimples (column 4, lines 48-55).

For claim 33, it is noted that Calhoun is silent about the width of the lines of recess. However, Calhoun does teach that the release values can be controlled simply by selecting the size and/or number of recesses, as set forth above, and when the recess is formed as dimples (i.e., dots), the breath is 10-50 μm . As such, it is believed that a suitable width is either inherently disclosed by Calhoun, or an obvious optimization to one of ordinary skill in the art, motivated by the desire to control the release value of the adhesive sheet.

For claims 34 and 35, although Calhoun does not expressly teach that at least 50% of the lines of non-adhesive material intersects the end edges of the adhesive layer, Calhoun does teach that recess(es) can form a continuous grid over the adhesive

layer as set forth above. As such, it is believed that at least 50% of the lines of non-adhesive material intersects the end edges of the adhesive layer is inherently disclosed.

For claim 37, in Example 2, Calhoun teaches an adhesive layer formed of heat-activatable (i.e., heat-activated) adhesive.

For claims 38 and 39, it is noted that Calhoun lacks express teachings that the non-adhesive material is a porous elastomer. However, since Calhoun does teach that the non-adhesive silicone layer provides release value to the adhesive sheet, it is believed that, in the absence of unexpected results, substituting the non-adhesive silicone layer with an equivalent non-adhesive material, such as a non-adhesive foamed elastomeric ink coating is well within the skill of the art, motivated by the desire to be able to use alternative equivalent non-adhesive material, or reduced manufacturing cost. Note also as evidence of the state of the art Bries et al. (US 6001471) which is directed to a removable adhesive tape. Bries teaches that the non-adhesive portion of one adhesive surface can be rendered non-adhesive by providing a release strip, the alternatives useable for release strips include films, papers, powders, foams, inks, other coatings or treatments, and the like, which can be used to render an adhesive layer non-adhesive (column 3, lines 9-16).

For claim 40, the Examiner notes that the method of winding fails to patentably distinguish the invention as claimed.

For claims 41-50, Calhoun teaches that in one embodiment only the bases of the recesses are coated with silicon. Although Calhoun lacks an express teaching of providing a release liner, the Examiner notes that providing a release liner is

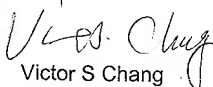
conventional and well known in the art of a pressure sensitive adhesive sheet, and it is believed that various textured release surface with patterned finish and/or randomly printed embedded non-adhesive particulate is also old and conventional. Further, it is believed that a pressure sensitive adhesive would inherently form a complementary textured surface to the release liner.

For claims 51-52, it is believed that forming double sided adhesive tapes are old and conventional, motivated by the desire to bond multiple substrate surfaces to form a laminate.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S Chang whose telephone number is 571-272-1474. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-0994.


Victor S Chang
Examiner
Art Unit 1771